LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-2. (Cancelled)

3. (Currently Amended) A system comprising:

a frequency generator that provides a clock signal having a frequency that varies based on an operating voltage; and

a controller that provides a control signal to adjust the operating voltage based on adjustments to the frequency of the clock signal, wherein the controller provides the control signal based on a number of cycles for the clock signal relative to a number of cycles for a second signal over a cycle time that encompasses plural cycles associated with the clock signal and the second signal, the second signal having a substantially fixed frequency. ~~The system of claim 2,~~ wherein the clock signal defines a variable clock signal and the second signal defines a signal having a substantially fixed maximum frequency for the clock signal.

4-8. (Cancelled)

9. (Currently Amended) A system comprising:

a frequency generator that provides a clock signal having a frequency that varies based on an operating voltage;

a controller that provides a control signal to adjust the operating voltage based on adjustments to the frequency of the clock signal;

a comparator operative to ascertain an indication of throttle events associated with the frequency generator implementing changes to the frequency of the clock signal, the controller providing the control signal based on the indication of throttle events; and

~~The system of claim 4, further comprising~~ first and second counters, the first counter being operative to count a number cycles associated with the clock signal, the second counter being operative to count a number cycles associated with a second signal having a substantially fixed frequency, the comparator ascertaining the indication of throttle events based on the relative number of cycles counted by the first and second counters.

10. (Currently Amended) A system comprising:

a frequency generator that provides a clock signal having a frequency that varies based on an operating voltage;

a controller that provides a control signal to adjust the operating voltage based on adjustments to the frequency of the clock signal; and

~~The system of claim 1, further comprising~~ first and second counters, the first counter being operative to count a number cycles associated with the clock signal, the second counter being operative to count a number cycles associated with a second signal having a substantially fixed frequency, the controller providing the control signal based on the relative number of cycles counted by the first and second counters.

11. (Original) The system of claim 10, wherein the relative number of cycles indicated by the first and second counters corresponds to an average indication of a number of changes implemented by the frequency generator to the frequency of the clock signal.

12. (Currently Amended) A system comprising:

a frequency generator that provides a clock signal having a frequency that varies based on an operating voltage;

a controller that provides a control signal to adjust the operating voltage based on adjustments to the frequency of the clock signal; and

~~The system of claim 1, further comprising~~ a second frequency generator that provides a second signal having a substantially fixed frequency corresponding to a desired maximum frequency for the clock signal.

13-17. (Cancelled)

18. (Currently Amended) A system to adjust voltage, comprising:

means for providing an indication of voltage induced throttle events for an integrated circuit; and

means for controlling a supply voltage of the integrated circuit based on the indication of throttle events;

means for determining a number of cycles for the clock signal relative to a number of cycles for a second signal having a substantially fixed frequency, the determined number of

cycles providing an indication of throttle events associated with changes in a frequency of the clock signal, wherein ~~The system of claim 17,~~ the means for determining further comprising:

means for counting cycles of the clock signal; and

means for counting cycles of the second signal,

the means for controlling adjusting the supply voltage of the integrated circuit based on a relative number of cycles counted by each of the means for counting cycles.

19-26. (Cancelled)

27. (Currently Amended) A method comprising:

determining whether adjustments to an operating frequency of an integrated circuit are within expected operating parameters based on adjustments made to the operating frequency performed over a cycle time that includes a plurality of cycles at the operating frequency;

adjusting a supply voltage based on the determination;

~~The method of claim 23, further comprising:~~ counting a number of cycles associated with a first reference signal having a substantially fixed frequency at a maximum operating frequency;

counting a number of cycles associated with a second reference signal provided at the operating frequency that varies based on the supply voltage; and

comparing the number of cycles associated with the first reference signal relative to the number of cycles associated with the second reference signal, the adjustment to the supply voltage being made based on the comparison.

28. (Previously Presented) The method of claim 27, further comprising ascertaining an indication of throttle events associated with adjustments to the frequency of the second reference signal based on the comparison, the adjustment to the supply voltage being made based on the indication of throttle events.

29. (Original) The method of claim 28, wherein the adjustment to the supply voltage are made based on comparing the indication of throttle events relative to at least one threshold, the adjustment to the supply voltage being made based on the comparison.

30. (Original) The method of claim 29, further comprising programming the at least one threshold to define operating categories for adjusting the supply voltage.

31. (Cancelled)